

# Post-Implementation Report

## PROJECT IDENTIFICATION

Project Name: CVISN - Commercial Vehicle Information Systems & Networks      Date: 08/14/2006  
Project Sponsor: ND Dept of Transportation      Project Manager: Mike Becker  
Report Prepared By: Mike Becker

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## A. PRODUCT EFFECTIVENESS

CVISN is a broad term used to describe a number of systems and network interfaces, one of which was an online E-Credentialing capability for carriers to electronically file the International Fuel Tax and International Registration Plan renewals, quarterly reports, added states, weight increases and apply for duplicate credentials. The benchmark was for 10% of the activity was being filed electronically.

The Motor Carrier applications supporting the IRP and IFTA systems were 17 and 10 years old respectively so a rewrite into a single carrier Web based application was designed and implemented.

### Project Objectives

1. Provide a J2EE web based system with expanded capabilities.
2. Allow for carriers to file electronically while maintaining security and integrity of the data.
3. Develop a user friendly, intuitive application for both internal and external users.
4. Insure that the application was capable of expanded functionality.

### Objectives Reviewed

#### J2EE based system with expanded capabilities:

A great deal of time and effort was spent on analysis in order to design an application that would maintain all of the current functionality required by the IFTA Agreement and the IRP Plan. The 2 systems, even though they dealt with the same user database (i.e. North Dakota based motor carriers) had no interface and the new system is carrier based with the underlying applications versus duplication.

Because the application was developed using web technology, the availability of on-line credentialing was built in without the need for separate security, setup or additional interfaces. The carriers and the MV personnel are accessing the same database but access is controlled by security roles.

#### Expanded capabilities and services include:

- J2EE application
- Oracle database
- Allowed for Service Bureau's to file for multiple clients
- Automatic cancellation and revocation with right to hearings if carriers did not comply with the respective plans
- Ability to control carrier access to one or both of the applications
- Through the inclusion of tables based fee tables changes are handled internally without the need for hard-coded change requests.

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- Added the capability of making adjustments to transmittals prior to printing.
- Interfaces with the VRTS (Vehicle Registration & Titling System) and eliminated the need to double entry.
- Automatic document storage into Filenet if file electronically.
- Carriers have the capability to pay through automatic payments, credit cards or cash.
- Carriers have 24-7 access to the system and no longer require staff available to issue updated credentials, weight increases, added states or vehicles.
- Minimal data entry because of the sophistication of the computing of fees.
- IRP renewals use IFTA quarterly reports for states and mileage so the carriers only need to review their vehicle data.
- Additional audit functionality added for the DOT's internal audit staff.

## Allow carriers to file electronically while maintaining security and data integrity:

The system was designed that a motor carrier will only have access to their own records and only to the IRP application if approved by the Motor Carrier Section. Each account has an administrator that can allow additional users.

Service Bureaus must provide written documentation of carriers who they will be filing for.

All external users must apply for a state user-id and are provided with an authorization code prior to access being given. The Motor Carrier Section reviews all authorization letters and controls which applications the carriers can access.

## Develop a user friendly, intuitive application for both internal and external users:

If a user is familiar with using a web browser, the system is quite user friendly but if this is the first time, there is a learning curve.

## Insure that the application was capable of expanded functionality:

Additional functionality:

- The application was developed to allow for the membership in both the IRP and IFTA Clearinghouses which will be added within the year.
- If Motor Vehicle approves, carriers can be given their own inventory of decals and plates for self issuance.
- Interface capability exists to create a CVIEW (Commercial Vehicle Information Exchange Window) for real time access by law enforcement.

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## **B. CSSQ MANAGEMENT**

The project was completed within the project time line and under budget with two scope changes.

1. The Single State Registration System was excluded from the project as we were unable to obtain requirements from Federal Motor Carrier on the new UCR (Uniform Carrier Reporting) system. UCR will become a reality in the future but it is undetermined if we will be incorporating it into the MC Online Services application since it is possible that it will be a stand alone national system.

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2. The membership to the IFTA and IRP Clearinghouses was removed in late 2005 as Motor Vehicle did not have the dollars allocated for the membership dues or any contractual agreements with the respective agencies. We have applied for and received CVISN grant funds for the membership dues and programming costs and have initiated a new project to be completed this biennium. The MC Online Services was designed to incorporate the clearinghouse transfers so this should not have a big impact on the existing transmittals within the application.

The only schedule change was the extension of the deployment of the International Registration Plan. The initial project schedule had a implementation date of November 2005 but the Motor Vehicle Division requested it be postponed until February since December/January are their highest workloads. The request was approved.

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## **C. RISK MANAGEMENT**

The initial top level design completed in 2002 noted risk areas of continued Federal matching dollars, carrier data privacy and security.

Risk areas not noted were the anticipation of ITD staff being reassigned for periods of time to other 'high priority' projects, the staff availability of Motor Carrier personnel for system testing and review.

## **D. COMMUNICATIONS MANAGEMENT**

The initial communications plan called for quarterly Executive Management briefings but due to scheduling conflicts, we were limited to once every six months. Executive briefings were formal presentations and documented.

The project team met weekly throughout the project and almost daily during the design phase. Known issues or decision were escalated to management for decisions. We did have one end user who felt that he wasn't included in all of the meetings even though they were of a technical nature which he would not have had any viable input.

Recommendations for future project's communication plan would be to limit the Executive Committee to only one director so scheduling would not be such an issue.

## **E. ACCEPTANCE MANAGEMENT**

Acceptance management was obtained at the major milestones of the project and at the end of each budget cycle. Acceptance management was at completed at two levels, once between the

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IT Division and the IT Department and once between the IT Division and the end users prior to production deployment.

## **F. ORGANIZATIONAL CHANGE MANAGEMENT**

Three scope changes were processed through change management as noted in the CSSQ Management.

## **G. ISSUES MANAGEMENT**

Issues noted in system and application testing were recorded and monitored within the Work Management System.

Non-application testing issues were addressed as they became known and were escalated to the division director level for resolution when appropriate.

## **PROJECT IMPLEMENTATION AND TRANSITION**

The IFTA application was deployed in June 2005 with minimal disruption to the Division. The biggest issue encountered was that the carriers had difficulty understanding the necessity for the authorization code and the sign up procedures.

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## **I. PERFORMANCE OF PERFORMING ORGANIZATION**

On project initiation, a full time individual from the Motor Carrier Section should have been assigned by the Motor Vehicle Division for testing, database cleanup and help screens. The IT Division was required to push the end users to test because their daily work was priority. There was also a switch in MV management 2 years into the project so established requirements had to be revisited and reestablished. The Motor Carrier Section had a great deal of freedom and made subjective judgment calls when handling penalties, and internal procedures. The MC On-line System handles these automatically, there was a learning curve and procedure changes required.

We are still in the process of transferring issues to our DOT HelpDesk. The end users tend to rely heavily on IT staff but we are reiterating the proper routing of issues.

We underestimated the lack of understanding of a few of the Motor Carrier personnel's unfamiliarity with basic web functionality so a good deal of time was needed explain how credit card process is handled on the Internet.

Since implementation, the Motor Carrier Section users have been very supportive of the system and are very willing to work through issues. None would go back to the old applications.

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## J. PERFORMANCE OF PROJECT TEAM

The project team (IT Division, Motor Vehicle & IT Department) worked very well together throughout the project. The only issues noted were the timeliness of Motor Carrier meetings their deadlines of their assignments.

Information Technology Department Project Evaluation matrix completed by the DOT Project Manager rated 7 Excellent and 3 Good.

## K. KEY PROJECT METRICS

### COST

Final Cost	Final Approved Baseline Cost Estimate	Difference from Final Cost	Original Cost Estimate	Difference from Final Cost
\$ 1,249,833.71	\$ 1,367,249.00	(\$ 117,415.29)	\$ 1,770,836.00	(\$ 521,002.29)
		(8% under budget)		(29% under budget)
Number of approved changes made to the original budget.				2
Number of "re-baselined" budget estimates performed.				2

### SCHEDULE

Number of milestones in baseline schedule.	6
Number of baseline milestones delivered on time (according to last baselined schedule).	4
Difference in elapsed time of original schedule and final actual schedule.	3 months
Difference in elapsed time of final baseline and final actual schedule.	3 months @ Project sponsor request

### SCOPE

Number of baseline deliverables.	4
Number of deliverables delivered at project completion.	2
Number of scope changes in the post-planning phases.	2

### QUALITY

Number of defects/quality issues identified after delivery.	0
Number of success measures identified in the Business Case that were satisfied or achieved at project completion.	3